3-month summary

- A mild 3-month period is more likely than a cold one
- However, cold-related impacts, such as snow, remain possible, especially later in the period
- Slightly higher than normal chance of wet conditions

3-month likelihood of impact

Temperature

15%	40%	45%
chance the season will be COLD	chance the season will be NEAR AVERAGE	chance the season will be MILD
0.8× the normal chance	0.7× the normal chance	2.3× the normal chance

Precipitation

20%	55%	25%
chance the season will be DRY	chance the season will be NEAR AVERAGE	chance the season will be WET
1.0× the normal chance	0.9× the normal chance	1.3× the normal chance

Wind speed

20%	60%	20%
chance the season will be CALM	chance the season will be NEAR AVERAGE	chance the season will be WINDY
1.0× the normal chance	1.0× the normal chance	1.0× the normal chance

1-month summary

- Higher than normal chance of October being warm
- Slight increase in the chance of a dry October
- A probable decrease in storminess compared to normal
- Greater than normal chance of periods of light winds and overnight fog

1-month likelihood of impact

Temperature

15% chance the month will be COOL	55% chance the month will be NEAR AVERAGE	30% chance the month will be WARM
0.8× the normal chance	0.9× the normal chance	1.5× the normal chance

Precipitation

30% chance the month will be DRY	60% chance the month will be NEAR AVERAGE	10% chance the month will be WET
1.5× the normal chance	1.0× the normal chance	0.5× the normal chance

Wind speed

30% chance the month will be CALM	65% chance the month will be NEAR AVERAGE	5% chance the month will be WINDY
1.5× the normal chance	1.1× the normal chance	0.3× the normal chance

Understanding the Outlook

The Outlook uses 3 categories for possible UK temperature, precipitation and wind speed in the next 1 and 3 months:

COLD, NEAR AVERAGE and MILD for 3-month temperature
COOL, NEAR AVERAGE and WARM for 1-month temperature
WET, NEAR AVERAGE and DRY for precipitation
CALM, NEAR AVERAGE and WINDY for wind speed

These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
NEAR AVERAGE | MILD | MILD | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | MILD | MILD
WET | NEAR AVERAGE | WET | DRY | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | WET | NEAR AVERAGE | NEAR AVERAGE
WINDY | NEAR AVERAGE | WINDY | CALM | NEAR AVERAGE | NEAR AVERAGE | CALM | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE

Same 1-month period over the last 10 years

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | WARM
WET | NEAR AVERAGE | DRY | DRY | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | WET | WET | NEAR AVERAGE
NEAR AVERAGE | NEAR AVERAGE | CALM | CALM | WINDY | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE | NEAR AVERAGE

Outlook in context

Drivers of UK weather for October to December
The impact of global weather patterns on the UK increases through this period, particularly during late autumn and into winter. Drivers relevant to the current Outlook are:
• The warming of UK climate consistent with wider global warming trends
• El Niño continues to develop in the Pacific Ocean. In late autumn and early winter El Niño increases the chance of westerly winds affecting the UK.
• The easterly phase of the Quasi-Biennial Oscillation (QBO), which favours a reduction in the strength of the westerly winds over the UK

Long-range weather predictions
The Met Office and other prediction centres around the world routinely produce long-range predictions of conditions in the months ahead. For October, there is an increased chance of higher-than-normal pressure across northern Europe and lower than normal pressure across western and southern Europe, leading to a reduction in the likelihood of westerly winds affecting the UK. The main signals for the next three months are for low pressure to be near the UK, leading to an increased chance of wet conditions.

Impact
Given the higher-than-normal chance of a warm October, further late season warm spells, although not as extreme as in early September, are more likely than usual. October is more likely to be dry than wet, but spells of wet weather do remain possible. Given reduced chances of westerly winds, the likelihood of impacts from strong winds is decreased compared to a typical October. With an increased chance of calmer spells of weather, fog may be more prevalent at night than usual for the time of year. Over the next three months, conditions are more likely to be mild than cold. However, cold spells, with associated hazards such as snow and ice, are possible at times, especially later in the period. The likelihood of conditions being wet increases through the period and, overall, there is a slight increase in the chance of above normal precipitation. Whilst this Outlook does not indicate an increased likelihood of windy conditions over the next three months, stormy spells of weather are still likely at times, especially later in the period.

Outlook compared to normal likelihood

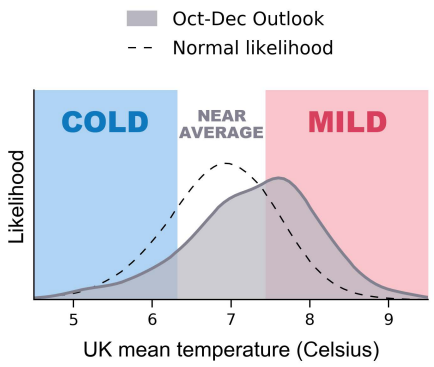
The curves below show the likelihood of the 1- and 3-month average temperature, precipitation and wind speed taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature, precipitation or wind speed at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

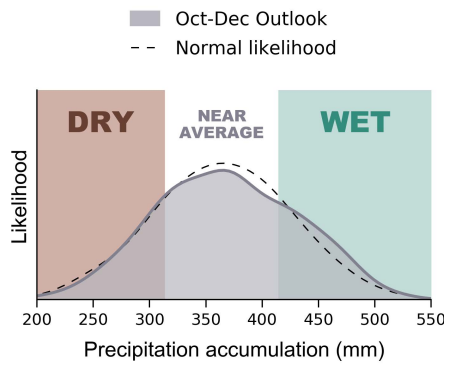
A shift of the solid curve to the left of the dashed curve indicates an increase in the chances of below-average temperature, rainfall or winds. A shift to the right, meanwhile, indicates increased chances of above-average values.

3-month temperature Outlook compared to normal



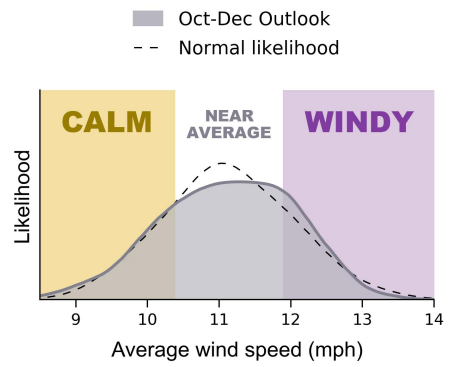
Likelihood leans towards mild

3-month precipitation Outlook compared to normal



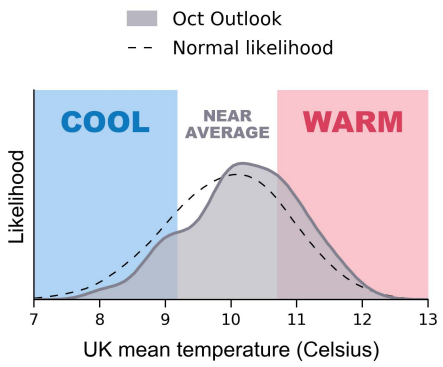
Likelihood leans slightly towards wet

3-month wind speed Outlook compared to normal



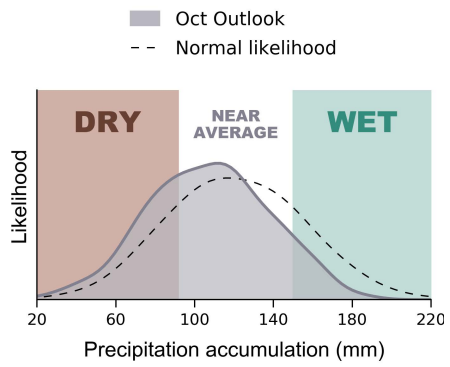
Likelihoods of calm and windy similar

1-month temperature Outlook compared to normal



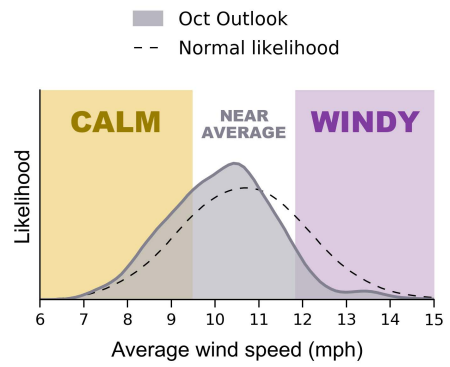
Likelihood leans moderately towards warm

1-month precipitation Outlook compared to normal



Likelihood leans towards dry

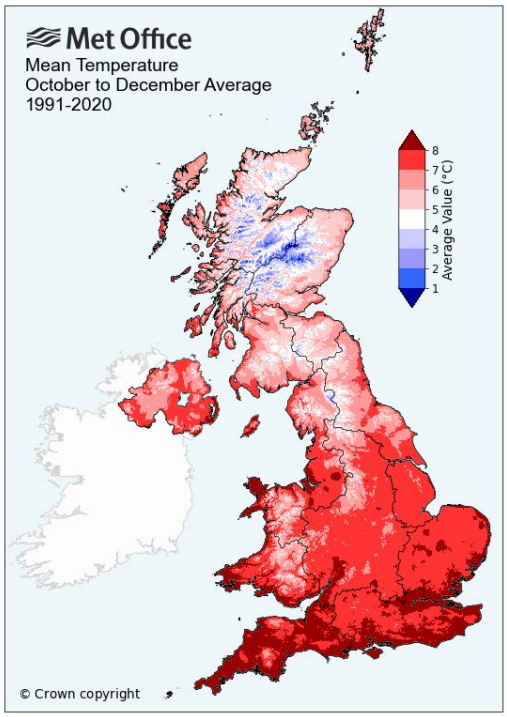
1-month wind speed Outlook compared to normal



Likelihood leans towards calm

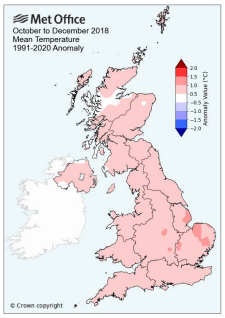
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK applicable to the 3-month Outlook period.

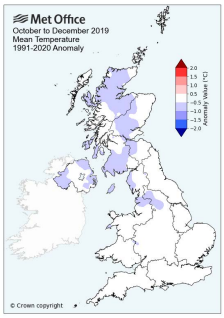


Average temperatures for October - December based on observations of past years.

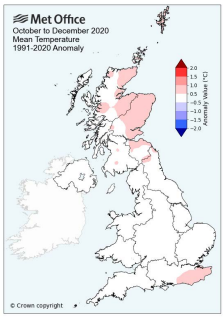
Last 5 years temperatures, difference from average (3-month)



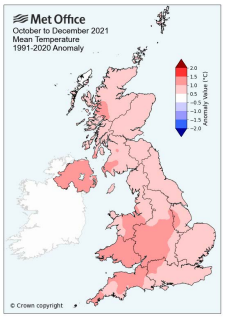
Oct - Dec 2018



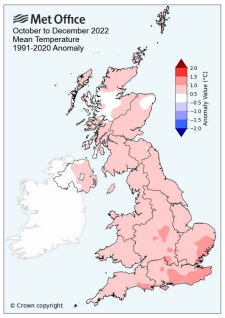
Oct - Dec 2019



Oct - Dec 2020



Oct - Dec 2021



Oct - Dec 2022

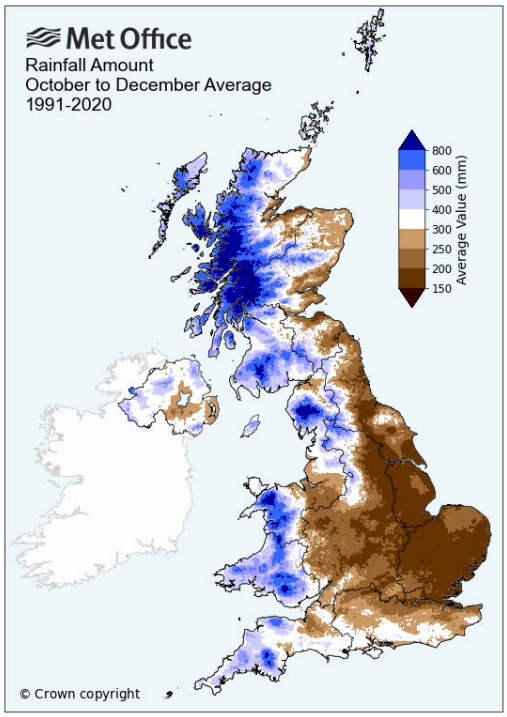
Anomaly (°C)

< -2.0	-2.0 to -1.5	-1.5 to -1.0	-1.0 to-0.5	-0.5 to 0.5	0.5 to 1.0	1.0 to 1.5	1.5 to 2.0	> 2.0

These maps show how October - December temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate milder-than-average conditions while blue shades indicate colder-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

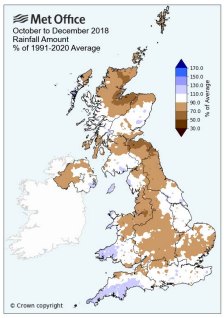
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK applicable to the 3-month Outlook period.

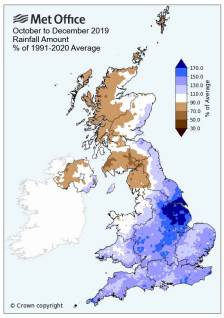


Average precipitation for October - December based on observations of past years.

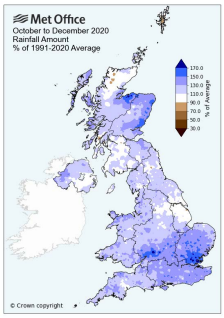
Last 5 years precipitation, difference from average (3-month)



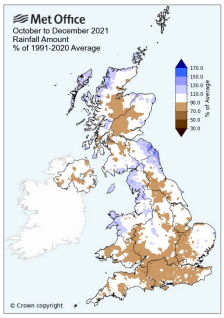
Oct - Dec 2018



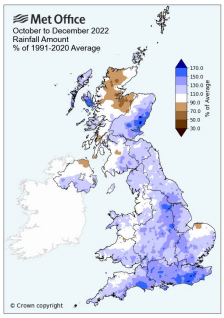
Oct - Dec 2019



Oct - Dec 2020



Oct - Dec 2021



Oct - Dec 2022

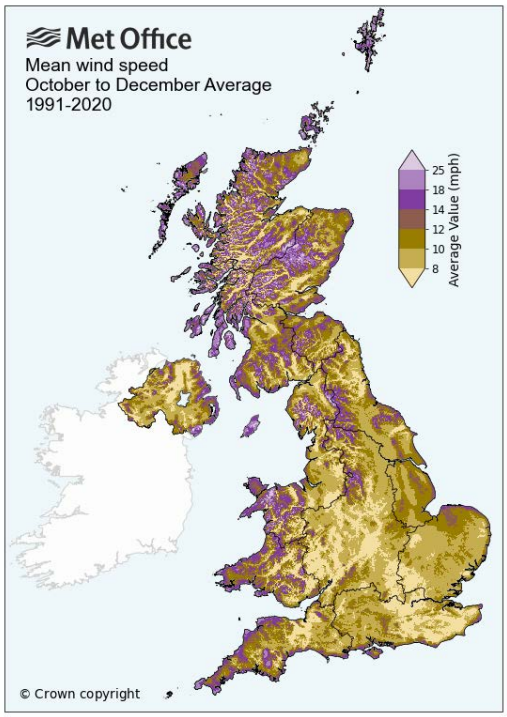
% of average

< 30	30 to 50	50 to 70	70 to 90	90 to 110	110 to 130	130 to 150	150 to 170	> 170

These maps show how October - December precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

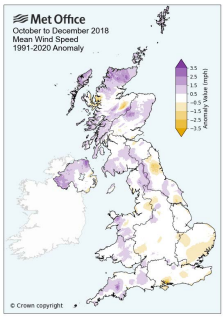
Long-term average wind speed (3-month)

This page shows the long-term average wind speed across the UK applicable to the 3-month Outlook period.

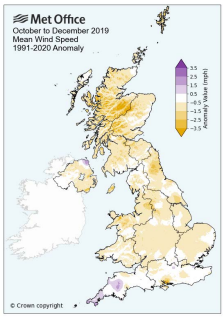


Average wind speed for October - December based on observations of past years.

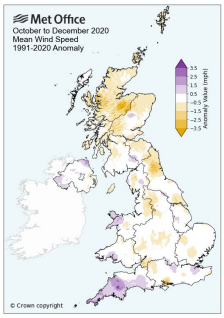
Last 5 years wind speed, difference from average (3-month)



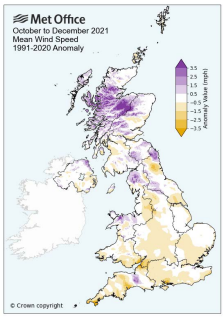
Oct - Dec 2018



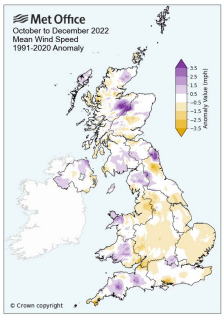
Oct - Dec 2019



Oct - Dec 2020



Oct - Dec 2021



Oct - Dec 2022

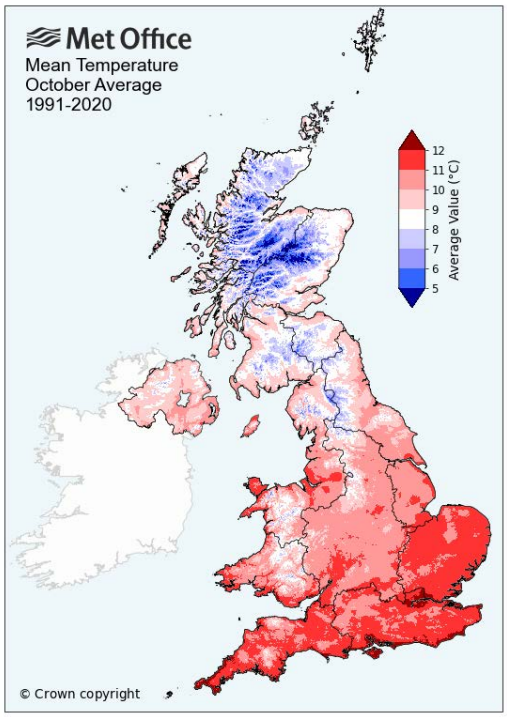
Anomaly (mph)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how October - December wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

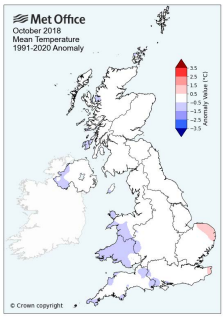
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK applicable to the 1-month Outlook period.

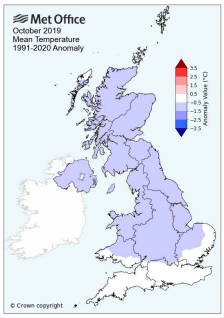


Average temperatures for October based on observations of past years.

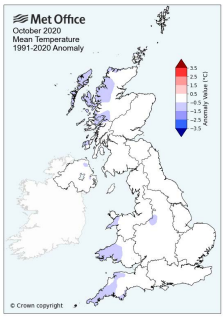
Last 5 years temperatures, difference from average (1-month)



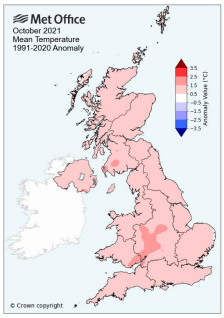
Oct 2018



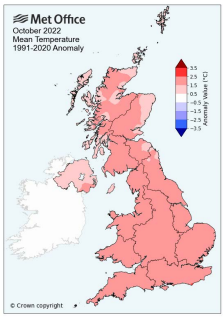
Oct 2019



Oct 2020



Oct 2021



Oct 2022

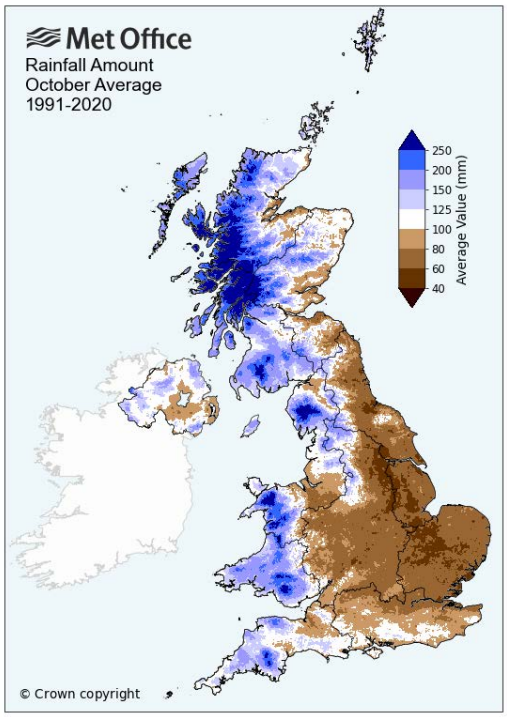
Anomaly (°C)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how October temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

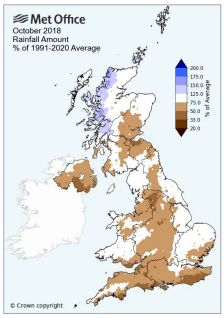
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK applicable to the 1-month Outlook period.

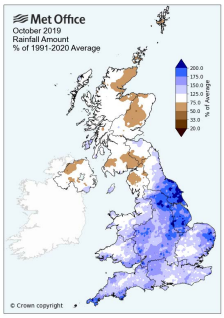


Average precipitation for October based on observations of past years.

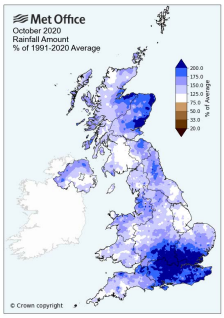
Last 5 years precipitation, difference from average (1-month)



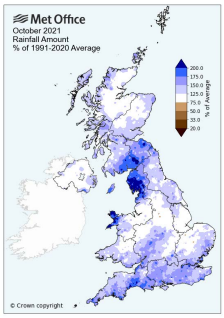
Oct 2018



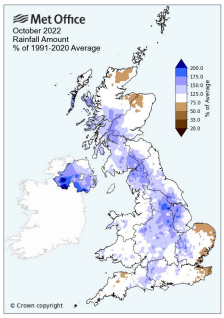
Oct 2019



Oct 2020



Oct 2021



Oct 2022

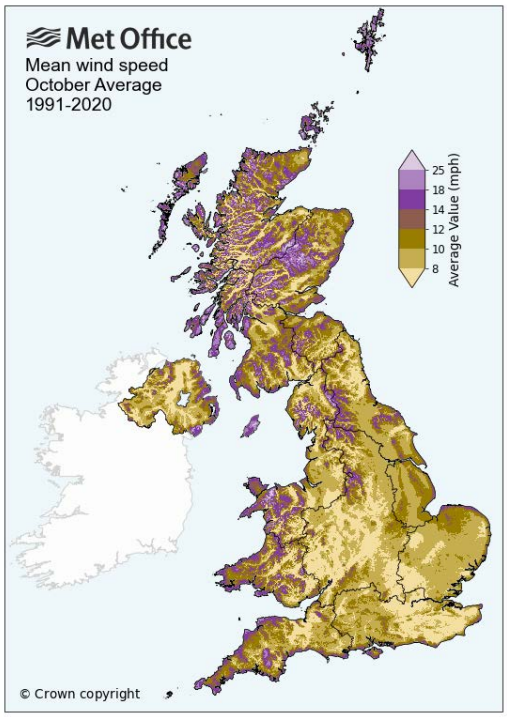
% of average

< 20	20 to 33	33 to 50	50 to 75	75 to 125	125 to 150	150 to 175	175 to 200	> 200

These maps show how October precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

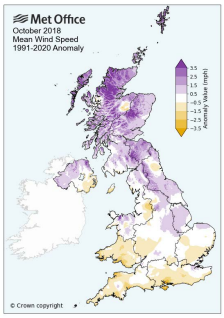
Long-term average wind speed (1-month)

This page shows the long-term average wind speed across the UK applicable to the 1-month Outlook period.

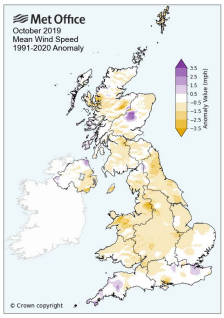


Average wind speed for October based on observations of past years.

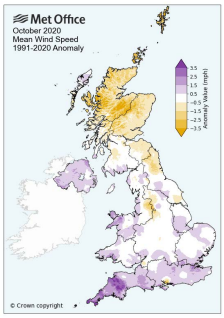
Last 5 years wind speed, difference from average (1-month)



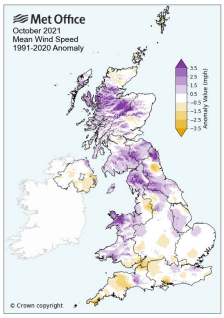
Oct 2018



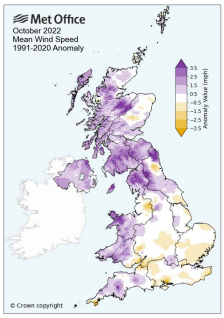
Oct 2019



Oct 2020



Oct 2021



Oct 2022

Anomaly (mph)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how October wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

Q&As

Q. What is the point of the Outlook, who is it meant for?
A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?
A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?
A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK-average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?
A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q. Does this Outlook mean there's no chance of cold weather in late autumn / early winter?
A. Whilst there is an increased likelihood of milder than average temperatures through the period as a whole, the risk of colder than average weather does increase slightly as we go through the Outlook period. In recent years, the likelihood of our coldest category has often been quite small reflecting the fact that UK climate has warmed compared to the long-term average. Above-average temperatures are not a guarantee of a prolonged sunny spell and periods of colder weather and regional variations in temperatures remain likely.

Q. Does this Outlook signal an increased chance of storms and flooding?
A. Whilst the Outlook shows a slightly increased likelihood of impacts from heavy rainfall, particularly later in the period, it cannot specify the severity, duration, location, or timings of specific events such as storms. Keep up to date the latest National Severe Weather warnings and forecast for your area on our forecast pages. The risk of flooding should be monitored using the warnings on the Environment Agency, SEPA, Natural Resources Wales and NI Direct websites.

Q. What impact will El Niño have on the weather this autumn and winter?
A. El Niño has only limited influence on the UK's weather and is only one of a number of factors that forecasters will take into account when assessing the forecast. Generally speaking, past El Niño events have tended to favour wetter and windier conditions for the UK in late autumn and early winter, although the effect is relatively easily disrupted by other factors in any given year.

About the Outlook

The Outlook presented here is for United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts – detailed weather forecast information is available on the Met Office website.

In this product, temperature refers to the average of daytime maxima and night-time minima. Wind speed refers to the average wind speed at a height of 10 metres. All numerical values relate to averages (temperature, wind speed) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1991-2020.

Find out more

- UK 3-month Outlook user guidance page:
  https://www.metoffice.gov.uk/services/government/contingency-planners/user-guidance/user-guidance
- Explainers on climate drivers (such as the El Niño Southern Oscillation and North Atlantic Oscillation) that influence seasonal forecasts and the impacts they can have on UK weather:
  https://www.metoffice.gov.uk/services/government/contingency-planners/seasonal-forecasts-and-climate-drivers-resources
- Contingency planners page:
  https://www.metoffice.gov.uk/services/government/contingency-planners/index

Contact us

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www.metoffice.gov.uk

Email:
enquiries@metoffice.gov.uk

Provide your feedback

We would like to hear your feedback on the UK 3-month Outlook to understand how it is being used. Please fill in the short form using this link or QR code to share your thoughts.